UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

AUG 31 2010

Carolyn Murphy
Chief, Environmental Section (CESWG-OD-N)
Galveston District Corps of Engineers
P.O. Box 1229
Galveston, TX 77553-1229

Re: Chemical Analyses for Dioxin in Galveston Bay/Houston Ship Channel

Dear Ms. Murphy:

During the summer months of 2009 the Environmental Protection Agency, Region 6 (EPA Region 6) contracted with a local environmental services firm to conduct monitoring of the polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans (Final Report of the December 2009 study enclosed on disc). The results of the monitoring study indicate polychlorinated dioxins and furans are entering the Houston Ship Channel and are associated with the unconsolidated material likely to be dredged for maintenance purposes and either disposed in the Galveston ODMDS or used beneficially for habitat restoration or beach nourishment.

Based on this information EPA Region 6 believes the exclusion of 2,3,7,8-tetrachloro-dibenzo-p-dioxin (2,3,7,8-TCDD) from the Contaminants of Concern in the Regional Implementation Agreement (RIA) for Ocean Dredged Material Disposal Site (ODMDS) is no longer appropriate for Galveston Bay. Further, we believe the Contaminants of Concern for beneficial use projects should include these same parameters. Based on the results of the study it is apparent the concentrations of polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo-furans represent a potential adverse effect to aquatic organisms and wildlife, as well as to humans since these pollutants bioaccumulate.

One source of polychlorinated dioxins is a site along the San Jacinto River that has subsided and now is leaching dioxins into the water and potentially contaminating unconsolidated sediment. Until the Comprehensive Environmental Response, Compensation and Liability Act (commonly called the Superfund) Program has completed the clean-up of the waste pits that are likely a significant source of dioxins we believe that before beginning any dredging project where the sediment will be used beneficially, the sediment should be sampled and analyzed for polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo furans. For beneficial use projects located in State waters, screening using National Oceanic and

Atmospheric Administration (NOAA) values can be used to determine if the sediment is environmentally acceptable. The use of the ODMDS will continue to be based on the tiered testing approach described in the RIA. We therefore request that for maintenance dredging where the sediment is planned for beneficial use projects or disposal in the ODMDS, monitoring include chemical analyses for 2,3,7,8-tetrachloro-dibenzo-p-dioxin and those dioxin and furan compounds included in the December 2009 study. We do not expect sediment destined for upland disposal should be subject to this monitoring requirement; however, we believe this action is necessary to adequately assess the potential adverse effects of disposal of dredged materials in the Galveston Channel ODMDS or where it may be used beneficially for ecological improvement.

Should you have any questions, please contact Stephen Bainter, of my staff, by telephone at (214) 665-8081, or by e-mail at bainter.stephen@epa.gov .

Sincerely,

Karen McCormick
Chief
Marine and Coastal Section

Encl.

cc w/o encl.
Barbara Keeler, 6WQ-EC
Doug Jacobson, 6WQ-EC
Steven Ireland, USACoE
Helen Drummond, GBEP
Kelly Keel, TCEQ
David Casebeer, Port of Houston